

CITY OF NEWTON, MASSACHUSETTS

Department of Planning and Development Michael J. Kruse, Director

Telephone (617)-796-1120 Telefax (617) 796-1142 E-mail mkruse@ci.newton.ma.us

Public Hearing Date: October 9, 2007 Land Use Action Date: December 11, 2007 Board of Aldermen Action Date: December 17, 2007 90-Day Expiration Date: January 8, 2008

DATE: October 5, 2007

TO: Board of Aldermen

FROM: Michael Kruse, Director of Planning and Development

Candace Havens, Chief Planner Jean Fulkerson, Principal Planner

SUBJECT: #275-07 DENNIS & SVETLANA MIRVODA petition for a SPECIAL

PERMIT/SITE PLAN APPROVAL to alter by more than three feet the existing contours of land to install a retaining wall at 121 HARTMAN ROAD, NEWTON CENTRE, Ward 8, on land known as Sec 82, Blk 15, Lot 45, containing approx

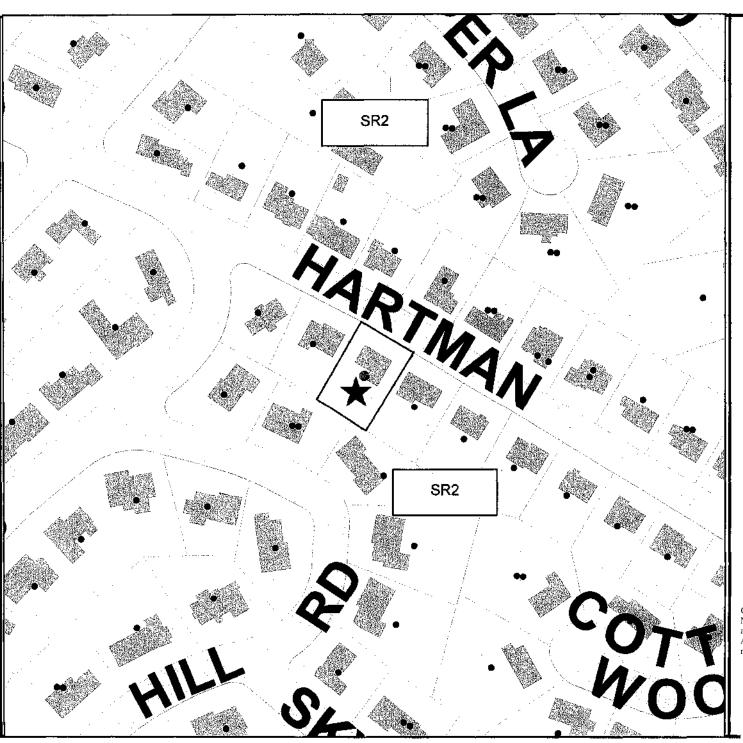
10,424 sf of land in a district zoned SINGLE RESIDENCE 2.

CC: Mayor David B. Cohen

The purpose of this memorandum is to provide the Board of Aldermen and the public with technical information and planning analysis which may be useful in the special permit decision making process of the Board of Aldermen. The Planning Department's intention is to provide a balanced view of the issues with the information it has at the time of the public hearing. There may be other information presented at or after the public hearing that the Land Use Committee of the Board of Aldermen will consider in its discussion at a subsequent Working Session.

EXECUTIVE SUMMARY

The petitioners are seeking a special permit for a greater than 3 foot change in grade for a lot located at 121 Hartman Road in Oak Hill. A 1,500 sq. ft. single-family dwelling occupies the site. This special permit request is the result of a zoning violation for work undertaken without proper City approvals and without benefit of a special permit. A Stop Work order was issued in November of 2005, and the petitioners began the review process in preparation for a special permit filing.



Zoning 121 Hartman Rd

City of Newton

Legend

• Addresses

Single Residence 1

Single Residence 2

Single Residence 3

Business 1

Business 2

• Business 4

IIMI Business 5

Limited Manufacturing

=Manufacturing

Multi-Residence 1

Fl Multi-Residence 2

MI Multi-Residence 3

MI Multi-Residence 4

Mixed Use 1

IM Mixed Use 2

ME OS/Rec.

Public Use



50 25 0

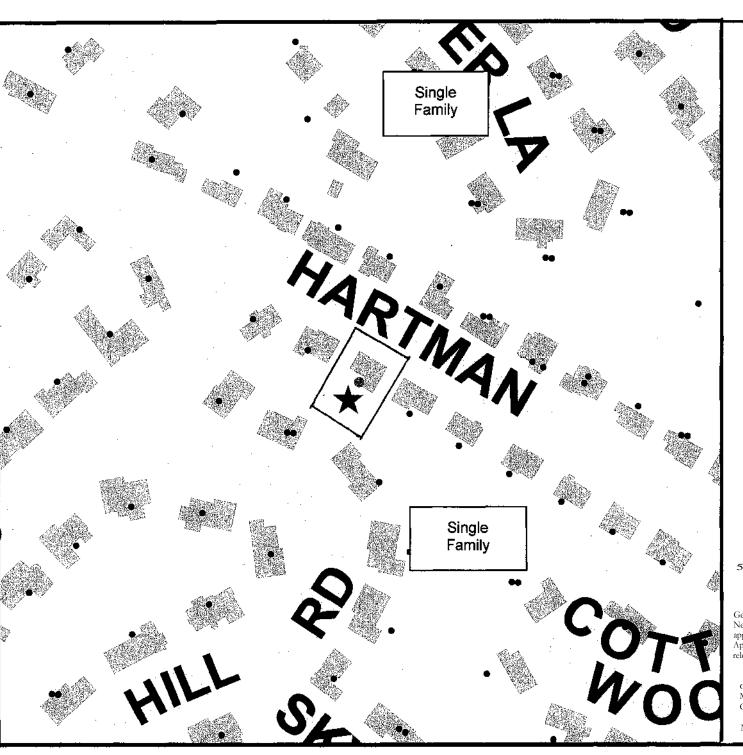
50

100 150 Feet

The information on this map is from the Newton Geographic Information System (GIS). The City of Newton cannot guarantee its accuracy of nor approve applications based solely on GIS data. Applicants for city permits must inquire of the relevant city department for applicable requirements.

City of Newton Mayor - David B. Cohen GIS Administrator - Douglas Greenfield

MAP DATE: September 21, 2007



Land Use 121 Hartman Rd

City of Newton

Legend

• Addresses

Single Family Residential

EM Multifamily Residential

MN Commercial

Industrial

NI Mixed Use

i.T12 Vacant Land

Golf Course

=Open Space

Private Educational

Nonprofit Organizations

Public Housing

III Tax Exempt







50 25 0

50

100

Feet

150

The information on this map is from the Newton Geographic Information System (GIS). The City of Newton cannot guarantee its accuracy of nor approve applications based solely on GIS data. Applicants for city permits must inquire of the relevant city department for applicable requirements.

City of Newton Mayor - David B. Cohen GIS Administrator - Douglas Greenfield

MAP DATE: September 21, 2007

I. BACKGROUND

In November 2005, the City became aware of significant re-grading occurring at 121 Hartman Road, Oak Hill, without the benefit of city approvals or permits. The work involved a significant cut into a steep hillside, supported by a two-tiered retaining wall system. A "Stop Work" order was issued because the retaining wall system was deemed unsafe and there was no previously approved Board Order granting a special permit for the alteration of the grade by more than three feet.

Since the Stop Work order, the homeowners hired a professional engineer to re-design the retaining wall system to the satisfaction of the Associate City Engineer.

II. ELEMENTS OF THE PETITION

The petitioners are requesting a special permit to alter the grade of the subject property by more than 3 feet in order to enlarge the usable rear yard portion of the lot. The change in grade occurred nearly two years ago. No topographic measurements were made prior to the grade change, so it is not possible to document the exact area of the greater than 3 ft. grade change, or the volume of earth that was removed from the site. A significant retaining wall is required to support the hillside extending behind the dwelling.

A chain link fence separates the area of the grade change and unfinished retaining walls from the rear yard of the property. Plans call for the removal of the unfinished retaining wall, and replacement with a modular retaining wall and necessary drainage system to ensure the petitioners' safety and that of the abutter immediately to the rear of the subject property.

HI. ZONING RELIEF BEING SOUGHT

Based on the Chief Zoning Code Official's zoning review, dated June 28, 2007 (SEE ATTA CHMENT "A"), the petitioners are seeking approval through:

- > Section 30-5(b)(4), to allow for the placement or removal of sod, loam, clay, gravel or stone, or other solid material, where the existing contours of the land are to be altered by more than three (3) feet;
- > Section 30-23 for Site Plan Approval, and
- > Section 30-24(d) for Approval of a Special Permit.

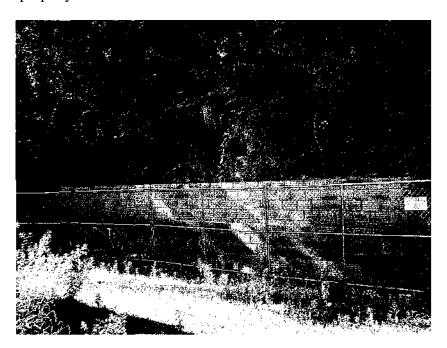
IV. SIGNIFICANT ISSUES FOR CONSIDERATION

In reviewing this petition, the Board should consider whether the alteration of the grade by more than 3 feet will have any adverse affects on the abutters and/or the character of this site in the context of the surrounding neighborhood.

V. CHARACTERISTICS OF THE SITE AND NEIGHBORHOOD

A. Site

The subject property is located at 121 Hartman Road, Oak Hill, in Ward 8, on a lot of 10,424 sq. ft. The single-family dwelling was constructed in 1951 and is a modest post-war raised ranch of 1,500 sq. ft. The rear of the lot features a very steep hillside. The abutting property to the rear is significantly higher in grade and sits well above the subject property.



B. Neighborhood

The subject property is located within a large Single Residence 2 District. The homes on Hartman Road are modest, featuring many split level and ranch homes. Hartman Road, like much of Oak Hill, is undergoing change, as more houses in the neighborhood are renovated with large additions. The southerly (odd-numbered) side of Hartman Road, where the subject property is located, backs up to a significant hillside and the abutting properties in the rear are substantially higher than those on Hartman Road.

VI. TECHNICAL ANALYSIS

A. <u>Technical Considerations — Dimensional Controls and Parking</u>

The following table compares the proposed single-family residences to the technical requirements in a Single Residence 2 District.

Single Residence 2	Required	Existing
Minimum lot size	10,000 sq. ft.	10,424 sq. ft.
Frontage	80 ft.	82 ft.
Setbacks		
Front	25 ft.	26.4 ft.
Side	7.5 ft.	7.6 ft.
Rear	15 ft.	59 ft.
Max. # of stories	2.5	1
Max. Floor Area Ratio	.30	.15
Max. Lot Coverage	30%	10.8 %
Min. Open Space	50%	86.1 %
Number of parking stalls	2	2

As shown in the table above, the single-family dwelling conforms to all dimensional requirements of the City's Zoning Ordinance.

B. Site Plan Review Criteria

1. Avoidance of major topographical changes; tree and soil removal shall be minimized and any topographic changes shall be in keeping with the appearance of neighboring developed areas.

In 2005, the petitioners began excavation on the subject property to provide the homeowners with more usable rear yard space. There is no documentation of previous topographic conditions at the site, and therefore no way to measure the extent of the grade change, or the number of trees that might have been removed. At this time, the excavation and unstable retaining wall are an eyesore and should be removed and repaired as quickly as possible.

The retaining wall proposed by the petitioners is a modular system that holds back the weight of the hillside and is back-filled to meet the grade of the existing hillside. The concrete blocks creating the retaining system will be visible once the wall is completed.

The hillside will be restored to the point where it meets the retaining wall. The petitioners' landscape plan must indicate how the backfill will be supported, and the type of plant material that will be used in the area of the backfill.

The final appearance of the retaining wall is also a concern. The concrete face of the retaining wall will be over 80 ft. long and as much as 8 ft. in height in places. The Planning Department believes that the face of the retaining wall should be covered such that the wall appears to be constructed of natural stone. The concrete blocks should not be visible.

2. Adequacy of the methods for regulating surface water drainage.

The Associate City Engineer has reviewed the plans for the proposed retaining wall and the proposed drainage. His memo of July 9, 2007 indicated that some additional information was needed on the plans. A letter dated July 25, 2007 from the petitioners' engineer addressed the required information. However, the Associate City Engineer's memo dated October 1, 2007 (SEE ATTA CHMENT "B"), expresses concerns about the stabilization of the slope during the excavation and construction of the proposed retaining wall. It is still incumbent upon the petitioners and their engineer of record to address the concerns of the City's Engineering Division.

3. Screening of structures from adjoining premises or from the street by walls, fences, plantings or other means.

The petitioners submitted a landscape plan, dated October 1, 2007 (SEE ATTA CHMENT "C"), showing existing plantings on the subject property. The southwest side of the lot is already partially landscaped and additional arborvitae and other shrubs are proposed as infill. Planning Department staff note that the landscape plan calls for an additional Burning Bush, which is on the "Do Not Plant" list maintained by the Massachusetts Department of Environmental Protection. The petitioners should be expected to identify an alternative evergreen species for that location.

On the northwest side of the single-family dwelling there is no existing landscaping, nor is any proposed. This side of the dwelling is the access point for the heavy machinery that must be brought in to complete the work on the grade change and retaining wall. The petitioners indicated to Planning Department staff that they expect to construct an addition to the existing dwelling in this location and, therefore, do not wish to install any additional plantings.

The Planning Department believes the petitioners should install additional landscaping to provide screening of the retaining wall from the street. The City has no guarantee that the petitioners will construct an addition that would provide the necessary screening. Once the re-grading and retaining wall are completed, the petitioners should install evergreen plant material of at least 3 ft. in height between the house and the west property line.

Between the subject property and the abutter at 115 Hartman Road there is an 8-foot high retaining wall topped by a 3-foot privacy fence. The residents of this

lot and the lot abutting the site to the rear will have no view of the proposed retaining wall.

B. Relevant Special Permit Criteria

1. The specific site is an appropriate location for such use and structure.

Now that the site has been destabilized the petitioners have the option of rebuilding with an appropriately engineered retaining wall or replacing the volume of earth that was removed With new fill and reconstructing the hillside. If the retaining wall is constructed properly and the safety of the abutting property in the rear is ensured, then the grade change of more than 3 feet and retaining wall would be considered appropriate for the site.

The proposed retaining wall is at least 80 ft. in length, at least 8 ft. at its highest point, and is visible from the public street.

<u>2.</u> The use as developed and operated will not adversely affect the neighborhood.

If the modular wall system is properly engineered, the grade change should not compromise the safety of the abutting properties or the existing trees that exist on the hillside at the rear of the property. The greatest impact on the neighborhood is from the appearance of the retaining wall, which is over 80 ft long and as much as 8 ft. high in places. Proper completion of the backfill and re-grading is crucial to maintaining existing trees and plant materials on the slope.

The Planning Department recommends that all areas of backfill be supported by anchored, bio-degradable netting, such as jute, to support the fill (and so indicated on the landscape plan). The netting should extend beyond the backfill and up the slope to protect the existing trees and ground cover. In addition, the landscape plan should indicate that a ground cover, appropriate for the soil and other conditions, will be installed within the biodegradable netting. The netting and the plant materials together will ensure that the backfill is stabilized and allow landscape materials to become established on the slope.

The petitioners must also satisfy the City's Engineering Division that the hillside will be stabilized during construction, especially near the two abutting residential properties on the east and the west.

VII. SUMMARY

The Associate City Engineer has unresolved concerns regarding the safe and proper installation of the retaining wall system proposed by the petitioners. The petitioners must ensure the safety of their property and all abutting properties. Given that nearly two years have past since this violation was first identified, the petitioners should be expected to address all engineering concerns at the October 9 Public Hearing.

In addition, the Planning Department expects the petitioners to update the submitted landscape plan to show:

- a retaining wall faced with natural stone,
- installation of evergreen shrubs at least 3 ft. in height to provide screening on the west side of the property,
- appropriate stabilization of the backfill and slope, and
- an appropriate ground cover for the soil and tree conditions.

ATTACHMENTS:

ATTA CHMENT A: Zoning Review Memorandum, June 28, 2007

ATTACHMENT B: Associate City Engineer, Memorandum dated October 1, 2007

ATTA CHMENT C: Schematic Landscape Plan dated October 1, 2007

Zoning Review Memorandum

Dt: June 28, 2007

To: Dennis Mirvoda, owner

CC: John Lojek, Commissioner of Inspectional Services

Michael Kruse, Director, Department of Planning an cv evelopment

Fr: Juris Alksnitis, Chief Zoning Code Official

Re: Request for approval of grade change in excess of 3 feet.

Applicant(s): D. Mirvoda

Site: 121 Hartman Rd. SBL: Sect 82, Block 15, Lot 45

Zoning: Single Residence 2 **Lot Area:** 10,424 sq. ft.

Current use: SF dwelling Prop. use: Single family dwelling

Background:

The subject lot is located within an existing subdivision with a building permit issued October 9, 1951 for the construction of the original dwelling. In 2005, the current owner was issued Building Permit #5110482 for a new addition and interior remodeling and in 2006 another Building Permit #6090258 to repair and replace a deck. However, the owner also performed extensive excavation along the hillside to the rear and initiated construction of a major tiered block retaining wall. The Inspectional Services Department (ISD) found it necessary on November 28, 2005 to issue several orders pertaining to the wall as follows: *Stop Work; Unsafe Structure;* and *Danger– Unsafe for Human Occupancy*. In the interim, various construction work has been allowed within the dwelling. In addition, ISD determined that the owner had altered the grade in excess of 3 ft., necessitating a special permit/site plan approval per Sections 30-5(b)(4) and 30-24 of the Zoning Ordinance. At this time, the owner seeks a Zoning Review in conjunction with the grade change and retaining wall.

Administrative determinations

- 1. Based on ISD records, the subject lot was created before December 7, 1953 and is subject to pre-1953 dimensional controls applicable to lots in the SR-2 zone. The following review is based on the materials and plans referenced under <u>Plans and Materials Reviewed</u>, below.
- 2. Section 30-15, Table 1, Density & Dimensional Controls in Residence Districts and for Residential Uses, sets forth the applicable density and dimensional controls for "old" lots in the SR-2 zone. The building shown on submitted plans meets the applicable controls referenced above.

3. Extensive retaining walls are proposed to the rear of the dwelling to hold the excavated hillside. The center portion of the proposed rear retaining wall rises approximately 7 ft. above grade, with wing sections on the east and west extending through the sideyard setbacks to the respective side lot lines. The owner indicates that an existing stone wall located along the side lot line on the west was built approximately in 2002.

The Commissioner of Inspectional Services, has determined that retaining walls which are an integral part of plans designed to handle grade changes in excess of 3 ft. may be addressed as part of the special permit process required for 3 ft. grade changes, and need not also to seek a variance from the Zoning Board of Appeals. Technical approval of plans provided to the City Engineer is required for the proposed retaining wall and various site and utility elements. Plans approved by the City Engineer should be provided not later than at the time of filing the petition with the Board of Aldermen. The Board of Aldermen may at its discretion approve, modify or disapprove the proposed 3 ft grade change and related retaining walls.

- 4. As shown on plan, an extended area at the rear of the house and along the westerly side will be excavated, thereby altering the grade in excess of 3 ft. This necessitates approval of a site plan and special permit by the Board of Aldermen per Section 30-5(b)(4) for the subject property. The owner indicates that as there was no previous survey establishing pre-existing topographical conditions, it is not possible to calculate the area affected.
- 5. While Section 30-23(b)(6) in conjunction with Section 30-24(a) requires the submittal of a landscape plan, the petitioner has not provided a landscape plan. In addition, the owner is responsible for complying with the Tree Preservation Ordinance. The applicant stated that as the proposed wall will be located closer to the rear of the house than the prior disapproved wall, no trees would be removed during construction. However, the owner needs to clarify whether any trees of significant caliper were removed as part of the initial excavation. The petitioner is responsible for providing a landscape plan and for complying with Sections 20-31 through 20-39, Tree Preservation Ordinance and obtaining approval of the Tree Warden.
- 6. Submitted plans indicate a stockade fence along the lot line on the west. In addition, another stockade fence is located on top of the existing stone retaining wall. Moreover, a substantial fence extension with open design has been added. The petitioner is responsible for providing sufficient information regarding the fence installations to ensure that these meet the requirements of Section 20-40, Regulation of Perimeter Fences.
- 7. See "Zoning Relief Summary" below.

	Zoning Relief Summary	
Ordinance		equired
	Lot 4 (SBL82-15-45)	
	Building	
	N/A	N/A
	Site	
30-5(b)(4)	Approval to alter existing contours by more than three feet as	T_{X}
	shown on plan, including placement and treatment of retaining	
	walls.	
30-23	Site plan approval, including landscaping.	X
1	Parking	
-	N/A	N/A
	Special Permit	
30-24(d)	Approval of special permit for grade change.	X
	Variances	
30-27	N/A	N/A
ZBA		

Plans and materials reviewed:

- Plan set titled "121 Hartman Rd., Newton, Massachusetts", dated 8/20/06, last revised 4/9/07, prepared by RAV & Associates, Inc., P.O. Box 359, Canton, MA 02021, stamped and signed by Richard A. Volkin, Registered Professional Engineer, consisting of the following:
 - Dwg. No. S-1001 Site Plan
 - Dwg. No. S-1002 Details
- Plan set titled "121 Hartman Rd., Newton, Massachusetts", dated 8/20/06, prepared by RAV & Associates, inc., P.O. Box 359, Canton, MA 02021, stamped and signed by Richard A. Volkin, Registered Professional Engineer, consisting of the following:
 - Dwg. 1 of 2 Retaining Wall Layout
 - Dwg. 2 of 2 Retaining Wall Typical Cross Sections
- Plan titled "Plan to Accompany Building Permit Application in Newton, Mass.", dated 2/17/07, prepared by Slaneyside Land Surveyors, Brighton, MA, stamped and signed by Stephen T. LaMonica, Professional Land Surveyor.
- ® Color photographs of site, dated 6/22/07, provided by Inspectional Services Department

CITY OF NEWTONENGINEERING DIVISION

MEMORANDUM

To: Alderman George Mansfield, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – 121 Hartman Road Retaining Wall

Date: October 1, 2007

CC: Lou Taverna, PE City Engineer (via email)
Candice Havens, Chief Planner (via email)
Linda Finucane, Associate City Clerk (via email)
Jean Fulkerson, Planner (via email)

In reference to the above site, I have the following comments for a plan entitled:

Site Plan 121 Hartman Road Newton, MA Prepared by: RAV Associates Dated: 8/20/'06 Revised: 2/1/'07 Response Letter: July 25, 2007

Drainage:

The drainage analysis appears to be correct for the City of Newton's 100-year storm event

2. The access ports shown on the Stormtech infiltration unit's detail are not dimensioned; they should be at least 24" round ports for future maintenance and inspections.

Wall Construction:

- I. Based upon a site visit on July 5, 2007 an existing segmental masonry unit (SMU) wall is under construction that appears to be one unit in depth. The proposed Westblock system (based upon the details) indicates an 8-foot wide base, how will the slope be stabilized during the additional excavation to install the leveling pad and the base units? The engineer of record needs to address this and address the stability of the slope, for the land above the construction site, consideration should be given for the angle of repose for the specific soil type behind the proposed wall. The revised plans still indicate areas where the new wall will require excavation beyond the existing SMU wall (into the hill), how will this area be stabilized during construction specifically near the two abutting properties on the east & west.
- 2. A detail is shown for a fence or handrail, however the detail does not indicate how high the fence or handrail is to be. All safety/security fences shall conform to the requirements of the Inspectional Services Department.
- 3. Since the proposed wall is a structural retaining wall, and based upon the notes from the engineer of record, material for the leveling pad shall be compacted to 95% of the maximum proctor density (ASTM D698); this will require certified density testing by a professional engineer and certified reports shall be submitted to the Inspectional Services Department.

General Conditions:

- 1. All tree removal shall comply with the City's Tree Ordinance.
- 2. The contractor is responsible for contacting the Engineering Division [617-796-1020] and scheduling an appointment 48 hours prior to the date when the drainage system will be made available for an inspection. The drainage system shall be fully exposed for the inspector to view; backfilling shall only take place when the City's Inspector has given their approval.
- 3. The applicant will have to apply for Sidewalk Crossing Permit with the Department of Public Works prior to any construction.
- 4. The applicant will have to apply for a Building Permits with the Department of Inspectional Service prior to any construction.

- 5. Prior to Occupancy Permit being issued, an As-Built Plan shall be submitted to the Engineering Division in both digital format and in hard copy. The plan should show all utilities, walls and final grades.
- 6. If a Certificate of Occupancy is requested prior to all site work being completed, the applicant will be required to post a Certified Bank Check in the amount to cover the remaining work. The City Engineer shall determine the value of the uncompleted work.

If you have any questions or concerns please feel free to contact me @ 617-796-1023

